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ABSTRACT

In 1987, Rockland Community College (RCC) established a Developmental Studies Department to serve students in need of remedial/developmental services. This report describes the services of the department and two special related projects. Part I focuses on the Developmental Studies Department, covering assessment, placement, and advisement; college skills and English-as-a-Second-Language instruction; physical facilities; and supplemental tutorial services. Part II presents information on the 1989-90 Special Services Project, a federally funded activity which provides supplemental tutorial services for the most severely financially and educationally disadvantaged students enrolled in developmental studies courses. The project is described in terms of physical sites, clientele, services, staff development, articulation with college personnel, and student evaluation of services. Part III reports on the RCC/Board of Cooperative Educational Services Pilot Project, which sought to remediate students' linguistic deficiencies in English and their native language and provide career exploration opportunities. Part IV evaluates of student progress in reading, writing, English language development, and mathematics during the 1989-90 academic year. The final two sections of the report consist of a comparative analysis of the three different populations served by the department and a series of conclusions and recommendations. The RCC Competency Assessment Policy is attached. (JMC)

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DEVELOPMENTAL STUDIES DEPARTMENT

SPECIAL SERVICES PROJECT

ROCKLAND COMMUNITY COLLEGE/BOARD OF COOPERATIVE

EDUCATIONAL SERVICES--PILOT PROJECT

ROCKLAND COMMUNITY COLLEGE

1989-1990

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English As A Second Language

JC 910 410

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Preface

Rockland Community College (RCC), an open access Community College, functions under the program of the State University of New York. The College is located in a suburban area 35 miles north of New York City. While Rockland County is considered one of the most affluent counties in the state, there are pockets of poverty with a substantial number of Blacks and immigrants (largely Hispanic and Haitian) located within the county. The College has expressed in its mission statement its commitment to serve a wide range of clientele and to provide services necessary to meet the needs of the clientele.

The Developmental Studies Department, established as a College department in the Fall 1987, serves students in need of remedial/developmental services. More than 40% of the entering freshmen who are identified through the College's competency assessment process are enrolled in the department yearly.

The following report: (1) describes the services of the department and of the federally funded Special Services Project which provides supplemental tutorial services for the most severely financially and educationally disadvantaged

students enrolled in Developmental Studies courses; (2) provides a report of the Rockland Community College/Board of Cooperative Educational Services Pilot Project conducted at The Haverstraw Extension Site, 1989-90, and (3) provides an evaluation of student progress in reading, writing, English language development and mathematics during the academic year, 1989-1990. Recommendations for program and curriculum development are also included.

DEVELOPMENTAL STUDIES DEPARTMENT

The Developmental Studies Department provides courses and services designed to prepare students lacking college-level skills to enter college courses and to complete a college degree or certificate. The department currently offers College Skills (CSK) courses which help native American students develop reading, writing, mathematics, and study skills. English As A Second Language (ESL) courses assist students whose native language is not English and help develop oral language, reading, writing, and study skills. The students in College Skills characterize the full range (age, sex, ethnic backgrounds, religions, social class) of clientele at the College. While the ESL enrollment continues to include some 250 students yearly from abroad, the majority of the students in ESL classes (84%) are first generation residents in Rockland County.

Individual assessment and advisement, small group and individual counseling and tutorial services are provided for students enrolled in College Skills and ESL courses. The department continues to provide counseling and tutorial services for College Skills and ESL students who move into the College mainstream as well.

Developmental courses and tutoring in specific areas such as spelling, vocabulary development, and effective listening are offered by Developmental Studies for all

Rockland students who can benefit. The department also serves as a faculty development and resource center, providing consultation with College faculty members. Coordinated efforts are developed in courses which include study strategies related to specific content, workshops, and seminars, identification and development of resource materials, and publication of papers and materials. In addition, the Chairperson of the Developmental Studies Department is responsible for coordinating all College-wide tutorial services for disadvantaged students and for providing College supervision of the Special Services Project.*

A diversified staffing model is utilized to provide a maximum of individualized instruction to meet the diverse needs of the students. The staff includes a Chairperson, College Skills Coordinator, English As A Second Language Coordinator, 7 full time instructors, 3 full time counselors, some 35 adjunct instructors and counselors, and some 25 teaching assistants, in addition to one full-time and one part-time clerical assistant.

* Title IV of the Act for Special Programs for Students from Disadvantaged Backgrounds.

ASSESSMENT, PLACEMENT, ADVISEMENT

Students are placed in College Skills or ESL as a result

of English and Mathematics assessments (See Appendix A). The assessment process is designed to ensure that all students are placed into course work appropriate to their skills.

Upon acceptance to the College, all entering students who have not previously attended college and are planning full time enrollment are required to take the Rockland Community College English and Mathematics Placement Examinations before registering for courses. Part-time students who intend to register for initial English language courses or credit bearing Mathematics courses are required to complete the examinations. All other part-time students must also take the examinations prior to registering for their twelfth degree credit. Federal regulations mandate that the College determine that entering students who receive financial aid have the potential to succeed in College and that they receive appropriate remedial/developmental services to help them succeed in college. Therefore, all full time and part-time students applying for financial aid must take the Rockland Community College English and Mathematics Placement Examinations before registering for courses as well. The English Placement Examination consists of an evaluation of reading comprehension (Comprehension Section of Descriptive Tests of Language Skills - DTLS) and a writing sample on a given topic scored holistically by trained readers. The Mathematics Placement Examination includes an

Mathematics Placement Examination includes an in-house computation section which students are required to take and an algebra section which students are encouraged to take.

After placement into College Skills or ESL each student has a conference with Developmental Studies Department instructors and counselors for needs assessment and to determine a course of study. Students are assigned to non-credit College Skills or ESL courses until re-assessment shows that they are ready to move into mainstream courses. Some, when the appropriate skill level has been reached, may select carefully chosen credit-bearing courses while they are enrolled in College Skills or ESL. The College Skills needs assessment is conducted at specific times throughout the academic year and the summer. Students are provided a general orientation to the College and College Skills, a tour of the campus, and referral to College counselors who determine financial aid eligibility and assess each student's full financial need. College Skills instructors explain the College assessment test results and the content of the various College Skills courses to which students have been assigned. Department counselors discuss with the students their vocational objectives and options and the estimated number of semesters they are likely to be in College Skills and then assist the students in selecting courses and

completing the registration process.

During the English As A Second Language needs assessment process, which is scheduled during College registration periods, the students also receive orientation and referral for financial aid counseling. They participate in additional ESL in-house testing in English language development, reading and writing for placement in specific ESL courses. The ESL instructors also explain to the students the test results and the content of the courses to which students are assigned. English As A Second Language instructors and/or Developmental Studies Department counselors then discuss with students their vocational objectives and options and the estimated number of semesters they are likely to be in ESL and assist the students in selecting courses and completing the registration process.

COLLEGE SKILLS/ESL COURSES

New students enrolled in College Skills full time are placed in one of four levels of the non-credit courses, Communication Skills (CSK 011-014), Communication Skills Reinforcement (CSK 021-024), and Developmental Course II (individualized learning activities and computer assisted instruction-CAI) based on their scores on the English Placement Examination. The courses are competency based and incorporate objectives in reading, writing, critical thinking and study skills. Students also enroll in

Strategies for College Success (CSK 031) and Understanding Human Behavior (CSK 032). The first course concentrates on an orientation to the nature of higher education with an emphasis on the structure at Rockland Community College and on the development of effective study skills, while the second course deals with the fundamentals of psychology. Students also enroll in a counseling seminar for an additional two credit hours. Depending on their curriculum goals and current time commitments new students may or may not enroll in Mathematics Skills (CSK 065) for an additional four contact hours plus Developmental Course V which provides up to six hours of individualized learning activities. Exit criteria are specified for successful completion of each level of Communication Skills and each module of Mathematics Skills. As they progress through the College Skills courses, students are permitted to enroll in some additional credit courses which have been approved by Department Chairpersons and Program Coordinators as appropriate at specific levels of reading and writing proficiency. Part-time students enroll in one of six levels of Communication Skills courses and counseling for a total of six contact/credit hours per semester. They may enroll in Developmental Course II or V for an additional two hours per week.

Students who have met the minimum competency in reading on the English Placement Examination but have not reached the

minimum competency in writing are assigned to Introduction to College Writing (CSK 028). Those students who have met the minimum competency in writing but have not reached the minimum competency in reading are permitted to enroll in English Composition I (ENG 101), but must also enroll concurrently in Efficient Reading (CSK 029). In addition to regular sections of English Composition I, the College also offers several special emphasis sections. Often after passing into the mainstream, College Skills students will enroll in ENG 101 (EGR) for additional academic support and ESL students will enroll in EN101 International designed for students for whom English is a second language.

Students enrolled in Communication Skills courses take all or part (reading/writing) of the English Placement Examination at the end of each semester until they have met the minimum competencies in reading and writing required for passing into the College mainstream. A modified mastery approach incorporating mediated instruction is utilized in Mathematics Skills. Therefore, students are not required to retake the Mathematics Placement Examination but they must master at 100% proficiency each module to which they have been assigned in Mathematics Skills before being permitted to take mainstream mathematics courses. Some students may achieve scores on the Mathematics Placement Examination which will permit them to enroll in Elementary Algebra for College

Students (MAT 101) with supplementary College Skills modules in Algebra Reinforcement (CSK 049) as well.

New students assigned to ESL courses full time may be placed in one of seven levels of the course, English For Speakers of Other Languages (ESL 035 - 065), and in one of six levels of the course, ESL Reinforcement Module (ESL 800-821), based on their scores on various instruments including the English Language Institute Test. These courses incorporate objectives in speaking, listening, reading, and writing. The ESL Reinforcement Module utilizes individual and some small group techniques as well as computer assisted instruction. Students may also enroll in Developmental Course IV which provides up to five hours of additional individual and group activities. Other ESL courses, Writing Module (ESL 071) and Reading Module (ESL 072), concentrate only on development of writing or reading skills. Students also enroll in various approved bilingual courses and others taught in English while taking ESL courses and Developmental Course IV. Part-time students enroll in one of seven levels of ESL courses and Developmental Course IV for four hours of additional individual and group activities.

Students enrolled in ESL courses take all or part (reading/writing) of the English Placement Examination at the end of each semester until they have met the minimum competencies in reading and writing required for passing into

the College mainstream.

PHYSICAL FACILITIES

College Skills and English As A Second Language courses are offered at the College's main campus in Suffern and at the Extension Site in Haverstraw and the Extension Center in Spring Valley. The majority of the students served in Haverstraw are of Hispanic backgrounds while those enrolled at the Spring Valley campus are largely Haitian. The Haverstraw Site, located at 15 West Broad Street, is in downtown Haverstraw while the Spring Valley Center is in a former elementary school at 185 North Main Street, just a few blocks from the downtown area.

Space is designated on Main Campus and in Haverstraw and Spring Valley for faculty and staff offices, classrooms and areas for individualized learning activities and CAI tutorials. On Main Campus individualized learning activities are provided in the Individualized Learning Activities Center and CAI tutorials are provided in the Computer Assisted Instruction Laboratory. Both in Haverstraw and Spring Valley there is a Student Development Center which serves to support individualized learning activities and CAI tutorials.

SUPPLEMENTAL TUTORIAL SERVICES

While small group and individualized tutoring and CAI tutorials are provided for students enrolled in College Skills and English As A Second Language courses, College

resources are limited and are supplemented by funding provided through the Vocational Educational Act (VEA), Educational Opportunity Program (EOP) and the Special Services Project (SSP). Special Services Project funding is designed to assist those students assigned to College Skills who are low income, first generation college students and who are the most severely educationally disadvantaged or who have the most severely limited English speaking ability among the CS/ESL student population but who have the academic potential to graduate from college.

Money from the VEA Disadvantaged grant focuses on services for disadvantaged students enrolled in College Skills or ESL courses to enable them to be successful in occupational education programs. Educational Opportunity Program funds provide educationally related support services and financial assistance to those students whose educational and economic circumstances have limited their post secondary education opportunity.

SPECIAL SERVICES PROJECT

The Special Services Project provides supplemental tutoring for 200 of the more than 2000 students enrolled in College Skills and English As A Second Language courses who meet the Project's eligibility criteria* and who have the greatest educational need based on assessment test scores and placement levels in College Skills and ESL courses. These 200 students represent the highest risk group in the College and are assumed to be those most likely to show poor achievement and high drop out rates. Therefore, the Special Services Project was designed to meet the following objectives:

1. 75-85% of the project students will remain in good standing at the College.
2. 60% of the project students will receive an associate degree or certificate or will transfer to another institution to complete their college degree.

* Amendment to Section 04 subpart 4 of part A of Title IV of the Act for Special Programs for Students from Disadvantaged Backgrounds. Federal Register, Vol. 47, No. 42, Wednesday, March 3, 1982 Rules and Regulations.

SPECIAL SERVICES PROJECT SITES

In the academic year, 1989-1990, the Special Services Project served 200 students enrolled in College Skills and ESL courses at the Main Campus (day/evening) and at the Local Learning Center in Haverstraw (day/evening) and Spring Valley (evening).

Main Campus Project tutorial facilities are in the Lester E. Rounds Instructional Technology Building in the Library Media Center. Other activities in this central location include the Pass Tutoring Program, the Mediated Mastery Instructional System, and the Computer Assisted Instruction Laboratory. The project office, which provides space for the Project Director and the Assistant to the Project Director, as well as project files, is located within the Center. A private cubicle for use by project tutors is located nearby. Several large storage cabinets are utilized to store instructional supplies (texts, workbooks, taped delivery systems, worksheets) for use by project students and tutors. Individualized and small group tutorial sessions take place within the Center and CAI sessions are conducted in the Computer Assisted Instruction Laboratory where 30 microcomputers are available for student use.

Tutorial services and CAI tutorials are offered in the Student Development Center in Spring Valley. An extensive storage area for instructional materials as well as office

space for project tutors is provided in the Center. Six microcomputers are available for student use. Haverstraw Local Learning Center tutorial services are also offered in the Student Development Center. Again, instructional materials and six microcomputers are available for student use.

CLIENTELE

Of the 200 students in the project all were first generation college students. A total of 133 of the students were both economically disadvantaged with deprived educational backgrounds or limited English language ability, and 67 were identified as having deprived educational backgrounds or limited English language ability.

Participants selected for the project on the basis of deprived educational background consisted of: (1) those students from College Skills courses who scored the lowest on the RCC English Placement Examination and/or the Mathematics Placement Examination and (2) those students who were initially identified as Special Services Project eligible while enrolled in College Skills and passed into the mainstream English Composition I (EGR) or Elementary Algebra for College Students courses.

Participants selected for the project on the basis of limited English speaking ability consisted of: (1) those students from the ESL courses who scored the lowest on the

RCC English Placement Examination and/or the Mathematics Placement Examination and (2) those students who were initially identified as Special Services Project eligible while enrolled in English As A Second Language and passed into the mainstream English Composition I International and/or Elementary Algebra for College Students courses. A total of 48 of the students were enrolled in College Skills courses and 152 were enrolled in ESL courses: (Main 95; Haverstraw 52; Spring Valley 5). There were 75 (37.5%) males and 125 (62%) females. The group included one American, Indian/Alaska Natives (0.5%), 31 (15.5%) Asian/Pacific Islanders, 84 (42%) Blacks, 71 (35.5%) Hispanics, and 13 Whites other than Hispanic (6.5%). The ages of the total group ranged from 17 to 58 (mean = 28.5). The median age of the group was 25.0. The English As A Second Language group's mean age was 28.0 (Median age = 26.0) and the College Skills group's mean age was 25.5 (Median age = 20).

SERVICES

Students were recommended for the Special Services Project tutoring by College Skills and ESL instructors and selected for the project by the Project Director. Although the instructors provided the basic prescription for tutorial services (reading, writing, study skills, English language skills, and mathematics), the project tutors diagnosed the

specific needs for additional individualized support for each participant. The support services included:

(1) A minimum of one hour per week of tutoring (individualized or small group) for each project participant enrolled in College Skills, English As A Second Language, mainstream English or mathematics courses.

(2) A minimum of two hours per week of computer assisted instruction for practice and drill for each project participant enrolled in College Skills, English As A Second Language, mainstream English or mathematics courses.

Tutorial forms including diagnostic, prescriptive, and evaluation information were maintained for each project participant. The tutorial forms were filed in the project office. Periodic review of progress was made by the Project Director, and completion of the tutorial prescription was considered the student's responsibility. Needs assessment was continuous with checkpoints built in to insure review of the prescription and revision when necessary (See Appendix B).

The tutors and project students together developed a semester workplan which specified the objectives to be met, the means by which the objectives would be accomplished, and

procedures for evaluating progress. The tutors kept the instructors informed of student progress, both on an informal basis and through written mid-term evaluations.

Students used a variety of instructional materials purchased through project funds: texts, workbooks, readers, worksheets, math manipulative and language tapes as well as CAI software for reading comprehension, grammar, speed reading, vocabulary development, logic, and critical thinking. Students also learned basic word processing and then utilized the word processor to complete tutorial and in-class writing assignments.

STAFF DEVELOPMENT

New project staff members attended pre-service training workshops prior to the beginning of tutoring in the Fall Semester, 1989, and in January, 1990, prior to the beginning of spring tutoring. New project staff members received a copy of the Special Services Project Tutorial Manual and Project Taxonomy of Materials. Topics covered in pre-service training included: (See Appendix B and C)

1. Project design
2. Nature of the clientele
3. Philosophy and rationale of the project
4. Roles and responsibilities of the staff
5. Needs Assessment and placement

6. Assessment and diagnostic instruments
7. Tutorial Forms
8. Instructional Materials
9. Cognitive styles and effective characteristics of clientele
10. Formal and informal diagnosis
11. Integration of study skills and content areas
12. Fostering cultural pluralism

The workshops were conducted by the Project Director. Consultants from inside the College (Instructors of College Skills, English As A Second Language, English, Mathematics, and the Speech Clinic Coordinator) were also engaged to deliver presentations.

Weekly training sessions for the tutorial staff dealt with needs and issues which were identified during pre-service training and throughout the course of the project. Some of the topics covered during recent sessions include:

1) Fostering students' metacognitive skills
2) Computer Assisted Instruction and Word Processing
3) The effect of cultural differences on the ESL tutoring environment
4) Strategies for allaying students' test anxiety
5) Tutoring the student with a physical/learning disability

6) Specific issues regarding individual students

Several weekly training sessions were devoted to tutors' sharing of ideas and strategies for use in project tutoring. Tutors delivered a mini-presentation of the instructional strategy using appropriate materials and then discussed the application of the strategy to individual students.

All project staff members were encouraged to attend College-sponsored faculty development workshops in January and June. The Project Director and several project tutors attended several College workshops dealing with English As A Second Language, College Skills, disabled students, racism, and cultural pluralism.

In April of 1990, the Project Director and several Project tutors attended the Critical Issues in Tutoring and Tutor Training Conference at Hunter College in New York City in order to represent the College and gain new information. Information and materials gathered from the conferences were shared with all project tutors during weekly meetings. The Project Director also attended the annual meetings of the National Association for Developmental Education (Boston), and the New York College Learning Skills Association (Ellenville, N.Y.). As 1989-1990 was the last year of the current funding cycle, the Director also attended a federal proposal writing seminar in Washington, D.C.

ARTICULATION WITH COLLEGE PERSONNEL

The Project Director had regular and on going contact with the Developmental Studies Department. She met regularly with the Chairperson of the Department, who provided direct College supervision of the project, to discuss administrative and curriculum issues. The Director participated in Developmental Studies Department Staff Meetings and met with the Coordinators of College Skills and ESL to establish overall tutorial objectives and procedures. The Director and project students also met regularly with the instructors of project students in order to establish specific tutorial objectives and to obtain prescriptions for tutorial activities.

The Director also met on numerous occasions with various College personnel such as the Project Officer, Director of Administrative Services, Director of Plant Facilities, Director of Institutional Research, Director of Financial Aid, Director of Educational Opportunity Program (EOP), and the Coordinators of the Local Learning Centers in Haverstraw and Spring Valley.

STUDENT EVALUATION OF SERVICES

In order to evaluate Special Service Project tutorial services, students completed a students survey form which was prepared in Fall of 1987, with the assistance of Dean Laura Harckham of the R.C.C. Office of Instructional and Community

Services.

During the 1989/90 academic year, survey results were overwhelmingly positive; indeed, data indicates that 100% of the students surveyed felt that the tutor was helpful and gave them work that they needed. In addition, 98% of the students indicated that they could write and/or read better because of the tutoring. When responding to the question, "What was most helpful in improving your reading and writing", many students specifically referred to the tutor in their responses. Student responses included comments such as, "My tutor is good; she knows everything I need to know; sometimes I am lazy and the tutor makes me work harder; she gives me work I need; she is very patient with me and answers my questions."

As was the case in 1988-89, when students were asked to provide recommendations for improving the tutoring, the only "suggestions" indicated were to extend the tutoring time, and a better location (provide better lighting, more privacy, and less noise).

ROCKLAND COMMUNITY COLLEGE

BOARD OF COOPERATIVE EDUCATIONAL SERVICES

PILOT PROJECT

The Rockland Community College/Board of Cooperative Educational Services (BOCES) project began classes at the Haverstraw Extension Site in the Fall 1989 semester. The initial phase of this pilot project has been an effective operation that has served both the community and the College well. Much of the success and acceptance of the program in Haverstraw comes from the careful planning that was completed before classes began. The goals and objectives were attainable and areas of responsibility were clearly delineated. All prospective ESL students and recommended candidates who would be best served by an involvement with BOCES were assessed and a class list was sent to the BOCES representative.

The initial planning work done by RCC faculty and BOCES representatives was followed up with frequent BOCES administrative hands-on involvement during the first few weeks of the RCC/BOCES classes. The leadership of Mr. Tom Brennan offered direction and clarity, and even though the ESL instructor was hired by BOCES, Mrs. Barbara Brantman, unable to speak Spanish, was able to earn the respect and confidence of her students due to her professionalism and thorough preparation.

Classes started on September 29, 1989, and ran for four mornings a week from 9 a.m. to 12 noon. The premise upon which these classes were offered by BOCES is that some students have such language deficiencies in both their native and English languages that it would be almost impossible for them to complete a course of study and be mainstreamed into the regular curriculum of the College. BOCES intended to remediate linguistic problem areas regarding basic communication and to provide career exploration.

Progress has been made by all participants in the project; however, success must be measured on an individual basis since each participant entered with his or her own unique areas of strengths and weaknesses. Many BOCES students in this RCC pilot had first language literacy problems which often impeded their second language acquisition. Others, although having had only limited access to a formal education in their countries, had been living in the U.S.A for many years and had acquired language "on the street."

The four language skills [listening, speaking, reading, and writing] were presented in the RCC/BOCES class. However, since most of the students had limited proficiency with the oral/aural skills, these were the areas stressed. The areas of phonology, semantics, and syntax provide the basis for interrelating the four skills. These were presented, and

specific high function vocabulary and structures were taught so that the students would interact with Anglos in a more meaningful manner.

RECOMMENDATIONS:

1. The RCC/BOCES program has merit and should be continued.
2. There should be increased communication between BOCES and RCC faculty regarding goals and strategies.
3. There should be periodic evaluations of student performance. Data from BOCES' John Test and RCC's English Language Placement Test (ELPT) should be shared and used in order to structure movement from level to level.
4. Certain basic entry tests and exit tests at the end of BOCES cycles should be implemented. This data would serve as a statistical reference to determine growth and to determine when a student would be best served in the RCC/ ESL program.
5. A Student Data and Interest Inventory should be kept to profile the students being served.
6. There should be more interaction between BOCES teaching staff and RCC faculty regarding course content so that successful students will be smoothly mainstreamed into the RCC/ESL curriculum.
7. There should be flyers in Spanish and English available

to all students and faculty regarding the purpose of the BOCES program in Haverstraw. This literature would articulate the goals and objectives of the program. If students cannot read, then explanation of the program objectives should be done orally in Spanish.

8. There should be BOCES counselors to provide career and job information. Many BOCES program participants of the Haverstraw pilot have been illiterate and have come from below poverty level; therefore, these BOCES clients often have had difficulties in dealing with schools, children, employment, health officials, and social services. BOCES counselors should be particularly sensitive in addressing not only vocational but personal problems of the clients. Bilingual/bicultural staff could be more effective in this role.
9. There should be a sharing of special educational events. For example, speakers came from the local chapter of Planned Parenthood to discuss the problem of AIDS this past term. The lectures were in Spanish and intended to disseminate basic information to the high risk populations of the community. RCC/BOCES classes should be officially encouraged to participate. This invitation should also be extended for social and cultural functions, such as Hispanic Week Celebrations at the College, holiday parties, etc.

10. There should be a file for basic data about students which could be used for reports, research, grant writing, etc. Attendance information, student performance on tests (aural, oral, written), and teacher observations would all serve to provide a picture of the RCC/BOCES program's strengths and weaknesses.
11. An effort to teach first language skills should be made with those students who have limited native language literacy.
12. Bilingual personnel who have a deep understanding of the culture should be employed whenever possible.
13. The College should look into the possibility of applying for grants to fund adult literacy programs.
14. College personnel, like Mr. Wil Rodriquez, should be asked to work with the RCC/BOCES students in finding appropriate job placements. Also, guest speakers from the community could be invited to address the students about entry level work options within their job clusters.
15. Computer assisted learning should also be offered to the RCC/BOCES class when the room is available. The computer resources of BOCES should be tapped to provide ESL software with an audio component. This multi-level ESL software could be used for RCC program participants as well.

Final Testing Scores

English Language Placement Test

May 1990

NAME	SCORE
De Leon, Israel	7*
Ferreira, Leonidas	19*
Henriquez, Estela	6*
Jimenez, Maria	13*
Perez, Mercedes	0*
Rivera, Justina	5*
Tavares, Marcelina	17*
Thillet, Wanda	13*
Velez, Marta	1*

* These students have limited literacy skills in both their first language and English. Therefore, the scores that have been recorded above do not reflect an understanding of the concepts since the test is a written one. The teacher, however, checks for basic mastery of concepts through oral exams and classroom usage. Some alternative testing system must be devised that would reflect progress for these BOCES students.

1989-1990

BARBARA BRANTMAN
ESL @ HAVERSTRAW RCC

ATTENDANCE
RECORD

NAME	(89 Days) TOTAL	NOTE
Wanda Thillet	76	Stopped attending 3/14
Martha Velez	72	
Maria Jimenez	82	
Marcelina Taveras	71	
Estela Henriquez	76	
Leonidas Ferreira	52	
Justina Rivera	54	Hospitalized due to accident
Israel De Leon	71	
Gilberto Leon	32	
Nancy Hilario	23	No attendance since January
Margoth Martinez	18	Severe asthma/Hospitalized
Raquel Nazario	48	Started RCC in January
Mercede Perez	29	Began school January 17
Ana Moreno	18	Began school January 30
Ana Cruz	7	Began school March 13

1989-1990
ATTENDANCE
RECORD

BARBARA BRANTMAN
ESL @ HAVERSTRAW RCC

BOCES ROCKLAND
CLASSES BEGAN
9/20

NAME	SEPT/OCT	NOV	DEC	JAN	FEB	MARCH
DAYS	20	20	12	15	09	13
Wanda Thillet	20	18	12	12	08	06
Martha Velez	18	15	09	12	07	11
Maria Jimenez	19	17	11	14	08	13
Marcelina Taveras	17	16	10	10	08	10
Estela Henriquez	18	18	10	12	08	10
Leonidas Ferreira	12	15	09	10	02	04
Justina Rivera	20	02	00	14	07	11
Israel De Leon	17	16	11	09	07	11
Gilberto Leon	13	09	00	08	02	00
Nancy Hilario	12	08	03	00	00	00
Margoth Martinez	11	07	00	00	00	00
Raquel Nazario	20	17	11	00	00	00
Mercede Perez	--	--	--	07	09	13
Ana Moreno	--	--	--	02	05	11
Ana Cruz	--	--	--	--	--	07

COLLEGE SKILLS

The achievement of students enrolled in College Skills courses in the areas of reading, writing and mathematics during the 1989-1990 academic year will be described in this section.

READING

Students performance in reading was assessed using the Descriptive Tests of Language Skills (DTLS) in both the Fall and Spring Semesters. The DTLS serves as the reading assessment instrument for all students entering Rockland Community College.

The DTLS results for both Fall and Spring semesters are summarized in Table 1. During the Fall semester, all levels of Skills students demonstrated statistically significant growth in reading. During the Spring semester, only CSK 014 students made statistically significant gains. Not too much significance should be attached to the lack of statistically significant gains during the Spring semester because of the very small numbers of students for whom scores are reported. Throughout this report the data for the Spring semester are very sparse, resulting in a lack of statistically significant results. Of note in this table is that students in the

highest levels of College Skills (CSK 014 and CSK 029) achieved mean post test scores which exceeded the college proficiency level of scaled score 11.

TABLE 1

DTLS PRE TO POST-TEST SCORES
FOR COLLEGE SKILLS STUDENTS BY
LEVEL

FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
CSK012	10	1.40	.518	3.80	2.97	2.57	.03
CSK013	40	4.68	1.72	8.50	3.11	6.42	.000
CSK014	62	7.92	1.50	11.24	3.28	7.80	.000
CSK029	63	8.79	1.60	13.32	3.37	10.28	.000
CSK071	45	5.91	2.56	9.20	3.50	7.05	.000
SPRING 1990							
CSK012	2	1.50	.71	3.50	3.54	1.00	NS
CSK013	2	6.00	1.41	9.00	2.83	3.00	NS
CSK014	4	6.00	3.37	11.25	2.99	10.97	.002
CSK029	8	9.50	1.20	11.37	4.90	.93	NS
CSK071	7	5.71	3.50	8.43	5.91	.78	NS

WRITING

Students writing competency was assessed through the writing sample which is a part of the English Placement Examination. This test, administered to all incoming students at Rockland Community College, served as both pre-test and as a placement indicator (as do DTLS scores) for students. Writing samples were scored holistically by a team of trained readers. Each essay was read and scored twice, independently, and the sum of the two scores is the student's writing score. Native English speaking students whose scores fall below the minimum competency level established by the college (score = 6) were assigned to College Skills courses. Students' post-tests produced at the end of the semester were scored similarly and in blind readings with essays from new incoming students.

The results in writing for the various levels of College Skills for both Fall and Spring semesters are summarized in Table 2. During the Fall semester all levels made statistically significant gains with the exception of CSK 012, the lowest level. During the Spring semester, CSK 014 and CSK 071 made statistically significant gains; the other levels did not.

The writing test results demonstrate that the College Skills population was in need of basic writing skills instruction and that for the most part, the results of that instruction were beneficial and did result in improved writing skills.

TABLE 2

WRITING PRE TO POST-TEST SCORES
FOR COLLEGE SKILLS STUDENTS
BY LEVEL

FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	p
CSK012	10	3.70	.483	3.60	.689	-.43	NS
CSK013	40	4.30	.911	5.00	1.26	3.50	.001
CSK014	63	4.84	1.19	5.71	1.39	4.20	.000
CSK028	110	3.99	.095	5.67	1.48	11.89	.000
CSK071	45	4.44	1.16	5.16	1.15	4.34	.000
SPRING 1990							
CSK 012	2	3.50	.71	4.00	.00	1.00	NS
CSK013	2	4.00	.00	6.00	.00	.00	NS
CSK014	4	4.50	1.00	6.75	1.50	2.18	NS
CSK028	20	4.00	.00	5.85	1.46	5.66	.000
CSK071	6	3.67	.82	5.00	1.10	3.16	.03

MATHEMATICS

Students whose Mathematics Placement scores indicated that they had not yet reached the level established as an indication of competency were assigned to Mathematics Skills (CSK 065). This course has been designed for students with remedial and developmental skill needs in mathematics and operates on a highly individualized basis. Students are assigned work in specified modules based on their diagnosed areas of need. Their progress is carefully monitored and their final grades reflect the degree to which they have mastered the content. In order to receive a P (pass) grade, a student has to complete the modules assigned and to achieve 100% accuracy on the tests associated with each module. An IP (in progress) grade is assigned to those students who made significant progress in their work and were close to completing their assigned modules. Students who did not demonstrate sustained work and therefore did not make satisfactory progress were assigned U (unsatisfactory) grades.

Table 3 summarizes the results of the Fall semester and Table 4 summarizes the results for Spring semester. The level of P and IP grades combined are similar to those for prior years (range 82-85% for Fall semesters and 75-79% for Spring semesters). The current year figures are 83% Fall and 75%

Spring. It is also worth noting that although the overall P/IP rate is roughly similar for day and evening students, the part-time, evening students progress at a much slower rate, earning fewer P grades and more IP grades than do their full time, day counterparts. Until this year, evening students also had a much higher failure rate than did the day students. Concern over the much higher failure rate in this group prompted the implementation of an intervention strategy for evening students in Spring 1989. When students were not in attendance at the Mathematics Lab for one week, they were called at home and urged to attend. The results in the first semester were striking; combined P/IP grades were 85%. This intervention strategy was continued during the current academic year with the result that in the Fall semester the combined P/IP rate for evening students was 86% and in the Spring semester it was 81%. In sum, there can be no question that students enrolled in Mathematics Skills continue to demonstrate significant growth in Mathematics.

TABLE 3

NUMBER AND PERCENTAGES OF
STUDENTS RECEIVING GRADES IN
MATHEMATICS SKILLS CSK 065

FALL 1989

	P		IP		U		
Group	N	%	N	%	N	%	Total N
Day	127	57.99	54	24.66	38	17.35	219
Evening	8	28.57	16	57.14	4	14.29	28
Total	135	54.66	70	28.34	42	17.00	247

TABLE 4

SPRING 1990

Day	100	49.75	50	24.88	51	25.37	201
Evening	9	29.03	16	51.61	6	19.35	31
Total	109	46.98	66	28.45	57	24.57	232

SPECIAL SERVICES PROJECT STUDENTS-COLLEGE SKILLS

Relatively few College Skills students were identified as Special Services Project students; therefore, it was impossible to provide a breakdown by level. Table 5 shows DTLS scores.

Table 6 summarizes the results of writing scores for Fall and Spring semesters, 1989-1990 for all College Skills students and for Special Services Project students. Again, all groups except the Spring Special Services students demonstrated statistically significant gains.

Special Services students in the College Skills program seem to be benefitting from the additional services provided as manifested in their gains in reading and writing skills.

TABLE 5

PRE-POST DTLS SCORES
FOR ALL COLLEGE SKILLS
STUDENTS 1989-1990
BY SPECIAL SERVICES STATUS

FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	p
All CSK	220	6.87	2.65	10.58	4.04	16.02	.000
SSP CSK	23	5.04	3.30	7.61	4.36	3.57	.002

SPRING 1990

All CSK	23	6.74	3.35	9.57	4.98	3.34	.003
SSP CSK	3	6.00	3.47	10.00	3.46	10.00	.000

TABLE 6

PRE-POST WRITING SCORES
FOR ALL COLLEGE SKILLS
STUDENTS 1989-1990
BY SPECIAL SERVICES STATUS

FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	p
All CSK	268	4.30	.90	5.42	1.42	12.21	.000
SSP CSK	31	3.87	.957	4.71	1.40	2.61	.01

SPRING 1990

All CSK	34	3.97	.521	5.71	1.43	7.23	.000
SSP CSK	5	3.80	.45	5.00	2.24	1.24	NS

ENGLISH AS A SECOND LANGUAGE

Many of the students who require remedial and developmental instruction are those for whom English is a non-native language. This instruction which includes practice in oral and written English is carried out on the Main campus of Rockland Community College and at two off-campus Learning Centers: Spring Valley and Haverstraw. Because the curricula and methodologies vary greatly from site to site, each Center's results are treated separately in the tables.

Students' placements in sections of classes and subsequent instructional emphasis are determined by performance on the English Placement Examination (scores on a writing sample and on the DTLS), the English Language Institute Test and a personal interview.

Each of the Learning Centers has its own sequence and configuration of classes for ESL students. The sequence at Main campus is primarily for full-time students; ESL 035 or 036 is the lowest level and ESL 071 is the highest. Haverstraw uses the same numbering system as Main campus for its courses for full-time students and the same numbering system as Spring Valley for its courses for part-time students. All of the ESL courses at Spring Valley are for part-time students, with ESL 030 the lowest level and ESL 061 the highest level. It is important to emphasize that the

criteria for entry to and exit from the levels and that the curricula for the levels vary from site to site making comparisons within levels but across sites virtually impossible.

READING

Tables 7 and 8 summarize the DTLS test scores for students enrolled in the Fall 1989 and Spring 1990 semesters respectively. Within sites, the data are presented separately for each level. The results present a mixed picture. Generally, students who were initially placed at a higher level made significant gains while those who entered at lower levels did not. Students on Main campus tended to do better than did students at other learning sites, and full-time students seemed to outperform part-time students.

TABLE 7

DTLS PRE TO POST-TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER - READING

FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	P
Main Campus							
035	20	1.40	1.05	1.50	1.61	.36	NS
036	21	2.62	2.85	2.33	2.18	-.35	NS
045	37	2.14	1.44	3.43	2.13	3.15	.003
046	61	2.93	1.87	5.43	3.76	4.41	.000
055	41	4.37	2.50	8.12	5.26	5.41	.000
065	58	7.31	3.21	11.12	3.83	7.56	.000
071	31	11.39	3.02	12.16	2.93	3.17	.003
072	13	6.77	2.92	12.69	3.66	4.32	.001
Spring Valley							
030	24	2.08	2.92	1.13	.45	-1.57	NS
040	14	1.57	1.16	1.36	1.08	-.47	NS
041	35	2.06	1.80	2.60	2.99	1.27	NS
061	42	5.48	3.49	8.45	4.93	4.18	.000
Haverstraw							
036	20	1.20	.523	1.55	.999	1.38	NS
045	20	2.25	2.69	1.65	2.23	-.87	NS
046	10	2.40	2.01	2.40	1.65	.00	NS

TABLE 8

DTLS PRE TO POST-TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER - READING

SPRING 1990

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	P
Main Campus							
036	08	2.50	.54	1.75	.89	-1.82	NS
045	21	2.10	2.14	3.24	2.10	2.36	.03
046	10	3.00	1.25	3.50	3.27	.61	NS
055	25	6.64	4.90	7.80	8.61	.56	NS
065	12	8.17	3.51	11.08	5.05	2.04	NS
Spring Valley							
030	3	1.00	.00	1.00	.00	.00	NS
040	8	1.00	.00	1.38	.744	1.43	NS
041	12	1.80	1.17	1.83	1.59	.72	NS
061	21	4.43	3.67	6.86	4.79	2.54	.02
Haverstraw							
036	6	1.16	.41	3.00	2.53	1.65	NS
045	11	1.64	.81	2.36	1.50	1.20	NS
046	9	2.14	2.69	3.36	2.68	1.87	NS

WRITING

Tables 9 and 10 show the results of the writing test scores for students in the Fall 1989 and Spring 1990 respectively. Growth in writing occurred at all sites for most students as demonstrated by the statistically significant gains. It should be noted that gains in writing were much more pervasive than were gains in reading. One may hypothesize that the increased and integrated tutoring available to students and the increased availability of Computer Assisted Instruction, especially word processing, may have produced this salutary effect on writing skills.

TABLE 9

WRITING PRE TO POST-TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER

FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	P
Main Campus							
035	19	1.26	1.45	2.58	.61	3.94	.001
036	21	2.19	1.12	3.05	1.02	2.83	.01
045	37	2.73	.99	3.22	1.06	2.13	.04
046	63	3.51	1.47	4.02	.79	2.61	.01
055	41	3.90	.54	4.12	.98	1.55	NS
065	57	4.02	.95	4.82	1.09	5.27	.000
071	31	3.97	.18	5.74	1.61	5.92	.000
072	13	5.23	1.01	5.69	.75	1.90	NS
Spring Valley							
030	23	1.87	1.29	2.39	.66	2.08	.05
040	9	2.33	1.12	3.11	1.05	1.58	NS
041	21	3.14	1.11	4.05	1.12	2.87	.01
061	42	3.98	.75	5.02	1.22	5.53	.000
Haverstraw							
036	19	.211	.631	.684	1.06	1.76	NS
045	20	.70	1.49	1.40	1.57	1.70	NS
046	10	2.50	.71	3.00	.94	1.46	NS

TABLE 10

WRITING PRE TO POST-TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER

SPRING 1990

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	P
Main Campus							
036	8	1.63	.92	2.50	.54	1.82	NS
045	21	2.71	.72	3.57	1.03	4.08	.001
046	10	2.70	.68	4.10	1.20	5.25	.001
055	25	3.72	.79	4.48	1.16	3.76	.001
065	12	4.08	1.08	5.58	1.68	3.59	.004
Spring Valley							
030	3	2.00	.00	2.00	.00	.00	NS
040	8	2.38	.744	2.63	.744	.68	NS
041	9	3.00	1.00	4.00	1.32	2.12	NS
061	19	4.37	1.07	4.63	1.12	1.56	NS
Haverstraw							
036	6	.67	1.03	.67	1.03	.00	NS
045	11	.18	.61	2.36	1.36	5.16	.000
046	14	2.36	1.28	2.64	.75	.81	NS

ENGLISH LANGUAGE SKILLS

Students in the ESL courses also take the English Language Institute Test which includes measures of general language usage, grammar, syntax, idiom and aural skills. Tables 11 and 12 summarize the results of this test for students in Fall 1989 and Spring 1990 respectively. Most students demonstrated statistically significant gains in general language skills. The exceptions tended to be among higher level students and may reflect a curricular shift for these students or a ceiling effect in the test itself.

TABLE 11

ENGLISH LANGUAGE INSTITUTE TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER

FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	P
Main Campus							
035	20	13.05	7.02	22.10	7.55	4.96	.000
036	18	27.17	5.27	38.22	3.64	11.84	.000
045	19	35.11	4.42	40.11	4.43	5.99	.000
046	52	39.10	4.53	42.58	4.19	7.01	.000
055	7	40.00	4.00	43.14	4.30	3.04	.02
065	18	44.39	3.48	44.56	2.43	.20	NS
Spring Valley							
030	24	14.92	5.33	16.08	10.61	.69	NS
040	17	29.76	8.74	34.06	8.68	2.73	.02
041	34	37.47	5.83	38.62	7.68	1.30	NS
061	39	44.18	2.33	44.72	3.36	.95	NS
Haverstraw							
036	21	11.48	6.24	18.86	8.53	4.10	.001
045	20	25.80	9.39	29.15	8.38	2.54	.02
046	9	34.78	5.47	40.67	4.98	2.89	.02

TABLE 12

ENGLISH LANGUAGE INSTITUTE TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER

SPRING 1990

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	P
Main Campus							
036	9	19.00	8.22	33.22	5.65	4.83	.001
045	0						
046	6	39.17	3.31	42.67	5.65	1.96	NS
055	14	39.29	11.90	43.21	5.96	1.05	NS
065	0						
Spring Valley							
030	3	7.67	4.16	13.67	2.52	6.00	.03
040	7	27.57	10.89	32.86	8.24	2.78	.03
041	12	33.50	8.84	37.67	7.51	2.87	.02
061	20	43.20	2.75	43.65	2.18	.56	NS
Haverstraw							
036	6	13.67	5.31	31.83	1.53	4.68	.005
045	11	23.55	6.09	25.36	7.98	1.12	NS
046	13	33.38	5.19	35.15	5.64	1.14	NS

Tables 13, 14 and 15 summarize the results of DTLS scores, writing scores and ELI test scores, respectively for all ESL students and Special services Project ESL students for the academic year 1989-1990. All the groups demonstrated statistically significant gains in reading, writing, and general language skills except for the Spring semester Special Services Project students who showed little growth in reading. This data would tend to support the notion that the effects of the Special Services Project have generally been beneficial for students receiving services under its aegis.

SPECIAL SERVICES PROJECT STUDENTS-ESL

TABLE 13

PRE - POST DTLS SCORES FOR
ALL ESL STUDENTS 1989-1990
BY SPECIAL SERVICES STATUS

FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	P
ALL ESL	447	4.14	3.70	5.90	5.15	9.61	.000
SSP ESL	106	3.01	2.90	4.17	4.47	3.38	.001
SPRING 1990							
ALL ESL	151	3.54	3.65	4.74	5.27	2.56	.004
SSP ESL	51	3.33	3.43	3.82	3.38	.89	NS

TABLE 14

PRE-POST WRITING SCORES
FOR ALL ESL STUDENTS 1989-1990
BY SPECIAL SERVICES STATUS

FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	p
ALL ESL	426	3.08	1.58	3.83	1.67	11.18	.000
SSP ESL	105	2.43	1.68	2.91	1.67	3.64	.000

SPRING 1990

ALL ESL	146	2.83	1.48	3.65	1.59	8.26	.000
SSP ESL	50	2.34	1.61	3.28	1.63	5.38	.000

TABLE 15

PRE-POST ELI SCORES
FOR ALL ESL STUDENTS 1989-1990
BY SPECIAL SERVICES STATUS

FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	S	$\bar{X}$	S	t	p
ALL ESL	298	31.75	12.47	35.49	11.62	10.40	.000
SSP ESL	73	24.92	13.33	30.85	11.73	7.23	.000

SPRING 1990

ALL ESL	101	31.81	12.19	36.47	9.41	5.38	.000
SSP ESL	32	27.84	11.36	32.94	9.36	3.38	.002

COMPARATIVE ANALYSIS

The Developmental Studies Department encompasses several different programs conducted at the Main campus of Rockland Community College and the two other learning centers; Spring Valley and Haverstraw. We have hypothesized that the populations served by English as a Second Language, College Skills, the Special Services Project, and the three different sites at which ESL is provided are different. Although our research over the years has shown that there is growth in reading, writing, and general language skills within all programs and across all sites, it has also shown that this growth varies by program and by site and is affected by students' entering skill levels and by the various curricula. In an effort to document the differences among groups, we have performed several analyses of covariance on the data.

An analysis of covariance is a statistical test which analyzes the sources of variation among groups on a single variable. For instance, in analyzing differences among groups on writing skills, post-test writing scores would be the variable under study. Because the groups vary initially on writing skills, that is, before instruction occurs, pre-test writing scores are utilized as the covariant. In effect, the differences among groups in entering levels of writing skill are removed statistically by adjusting the post-test means of the various groups. This statistical

manipulation results in post-test means being adjusted downward for those entering with the highest scores and upward for those entering with the lowest scores. The overall result is to compensate statistically for the differences in entering level of skill on the variable under study in order to determine if differences remain in post-test scores among groups. If such differences do exist, they can then be attributed to one or more of the possible sources of variation in the analysis, namely, program, site, level or Special Services Project status.

Table 16 shows a 2x3 analysis of covariance for ESL on post-test writing scores with pre-test scores as the covariate. There are six cells (groups) in the analysis: Main Campus Special Services, Main Campus non Special Services, Spring Valley Special Services, Spring Valley non Special Services, Haverstraw Special Services and Haverstraw non Special Services. In other words, there are two conditions (Special Services, non Special Services) and three sites (Main, Spring Valley and Haverstraw). In addition, the table has totals for columns (sites) and totals for rows (conditions) and a grand mean or average for the entire population. In the table the numbers within each cell are the means or averages for each group and the numbers in the parentheses are the numbers of subjects in the cell. From this table we can see that the non Special Services students at Main Campus

achieved a post-test mean score of 4.25 in writing; their counterparts at Spring Valley achieved a 3.84 mean score, and at Haverstraw the comparable group achieved a 2.04 score. For Special Services students, those at Main Campus had a 3.71 score, those at Spring Valley had a 3.50 score and those at Haverstraw has a 1.53 score. These mean scores are the unadjusted mean post-test scores for the six groups before statistically manipulating for the differences in entering levels.

The second part of the table describes the results of the analysis of variance. In this part of the table, all the sources of variation are listed at the left. The sources under investigation are the main effects: Special Services Project status and sites. In this analysis both main effects are statistically significant. There are statistically significant differences in the post-test writing scores of Special Services Project students (M=3.10) and non Special Services Project students (M=3.92) after these scores were adjusted for entering levels of writing skills. This fact suggests that the effects of the additional services provided as part of the Special Services Project did not have the desired result. Even after instruction, students in Special Services did not perform at comparable levels to non Special Services students. Similarly, there were statistically significant differences between post-test writing scores of

students at Main Campus (M=4.11), Spring Valley (M=3.82), and Haverstraw (M=1.79) centers. The differences in post-test writing scores at the three sites suggests that there are differences in the student populations served, the instructional services provided and/or the curricula offered at the three centers. There were no significant interaction effects which means that the variations among the six cells do not reach statistical significance individually. Finally, the covariant was statistically significant, which means that the pre-test scores are different from the post-test scores, demonstrating that all students in ESL did make gains in writing skill.

TABLE 16

2X3 ANALYSIS OF COVARIANCE FOR ESL/SPECIAL SERVICES
BY SITE ON POST-TEST WRITING WITH
PRE-TEST WRITING SCORES AS COVARIATE

CELL MEANS

		MAIN	SPRING VALLEY	HAVERSTRAW	TOTAL
NO	SS	4.25 (319)	3.84 (176)	2.04 (47)	3.92 (542)
	SS	3.71 (117)	3.50 (8)	1.53 (47)	3.10 (172)
TOTAL COLUMNS		4.11 (436)	3.82 (184)	1.79 (94)	3.73 (714)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre Writing	709.73	1	709.73	507.594	.000
Main Effects	94.95	3	31.65	22.64	.000
SS Status	16.56	1	16.56	11.84	.001
Sites	72.82	2	36.41	26.04	.000
Interactions-2 way					
Site X SSP status	.525	2	.262	.188	NS

Table 17 reports the results of a 2x3 analysis of covariance for ESL on post-test DTLS scores with pre-test DTLS scores as the covariate. Examination of the cell means and the means for columns and rows in combination with the part of the table dealing with the sources of variation shows that both of the main effects: Special Services Project status and sites, and the covariate effect are statistically significant. Thus, as with the writing scores, all students showed gains in reading from pre-tests to post-tests, but the gains differed for students at the three sites and in the two conditions.

TABLE 17

2X3 ANALYSIS OF COVARIANCE FOR ESL/SPECIAL SERVICES
BY SITE ON POST-TEST DTLS SCORES WITH
PRE-TEST DTLS SCORES AS COVARIATE

CELL MEANS

		MAIN	SPRING VALLEY	HAVERSTRAW	TOTAL
NO	SS	7.14 (320)	4.43 (200)	2.46 (48)	5.79 (568)
	SS	4.62 (117)	4.10 (10)	2.47 (47)	4.01 (174)
TOTAL COLUMNS		6.47 (437)	4.41 (210)	2.46 (95)	5.37 (742)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre DTLS	6262.26	1	6262.26	375.31	.000
Main Effects	426.80	3	142.27	8.53	.000
SS Status	132.16	1	132.16	7.92	.005
Sites	292.04	2	146.02	8.75	.000
Interactions-2 way					
Site X SSP status	24.26	2	12.13	.727	MS

The 2x3 analysis of covariance for ESL on post-test ELI test scores with pre-test ELI scores as the covariate in Table 18 shows the same pattern of gain for general language skills as for reading and writing skills. The significant covariate effect indicates gains for all students in general language development, and the statistically significant variance attributable to the main effect sites indicates differential growth in language skills at the three sites. The fact that the main effect related to project status was not significant indicates that the additional services provided through the project were having the desired effect of making the project students more like their non-project counterparts.

TABLE 18

2X3 ANALYSIS OF COVARIANCE FOR ESL/SPECIAL SERVICES
BY SITE ON POST-TEST ELI SCORES WITH
PRE-TEST ELI SCORES AS COVARIATE

CELL MEANS

		MAIN	SPRING VALLEY	HAVERSTRAW	TOTAL
NO	SS	41.01 (129)	36.26 (190)	29.29 (45)	37.08 (364)
	SS	34.75 (53)	33.50 (10)	28.21 (47)	31.85 (110)
TOTAL		39.19 (182)	36.13 (200)	28.74 (92)	35.87 (474)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre ELI	38784.60	1	38784.60	1116.93	.000
Main Effects					
SS Status	20.32	1	20.32	.585	NS
Sites	1136.76	2	568.38	16.37	.000
Interactions-2 way					
Site X SSP status	61.63	2	30.814	.887	NS

The next two sets of analyses report the results of a 2x2 analysis of covariance comparing ESL and College Skills students and Special Services Project participants and non-participants. Table 19 reports on post-test DTLS scores with pre-test DTLS scores as the covariate and Table 20 reports on post-test writing scores with pre-test writing scores as the covariate. The results of the analyses are similar.

These two tables show that the main effects of program (ESL or CS) and project status (SSP and non-SSP) and the covariate effect are all statistically significant for both reading and writing. All students in all programs grew in reading and writing skills; however, post-test scores in both reading and writing, even after adjusting for differences in entry level skills, were different for different groups. College Skills students' average scores were higher than ESL students' average scores; Non-project students' scores were higher than project students' average scores.

TABLE 19

2X2 ANALYSIS OF VARIANCE, SPECIAL SERVICES
BY PROGRAM (ESL OR CS) ON POST TEST DTLS WITH
PRE-TEST DTLS AS COVARIATE

CELL MEANS

		ESL	CS	TOTAL
NO	SS	5.79 (568)	11.01 (330)	7.71 (898)
	SS	4.01 (174)	7.81 (32)	4.60 (206)
TOTAL COLUMNS		5.37 (742)	10.72 (362)	7.13 (1104)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
DTLS	13280.07	1	13280.07	824.32	.000
Main Effects					
SS	191.15	1	191.15	11.87	.001
Program	1323.17	1	1323.17	82.13	.000
Interactions-2 way	3.32	1	3.32	.206	NS
SS X PROGRAM					

TABLE 20

2X2 ANALYSIS OF COVARIANCE, SPECIAL SERVICES BY PROGRAM (ESL OR CS) ON POST-TEST WRITING WITH PRE-TEST WRITING AS COVARIATE

CELL MEANS

		ESL	CS	TOTAL
NO	SS	3.92 (542)	5.68 (3.69)	4.63 (911)
	SS	3.10 (172)	5.00 (44)	3.49 (216)
TOTAL COLUMNS		3.73 (714)	5.61 (413)	4.42 (1127)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre Writing	1386.07	1	1386.07	794.88	.000
Main Effects					
SS	32.42	1	32.42	18.59	.000
Program	250.21	1	250.21	143.49	.000
Interactions-2 way					
SS X PROGRAM	.014	1	.014	.008	NS

These analyses must be dealt with carefully. All ESL students at all levels and at all learning sites are grouped together. All College Skills students, regardless of level, are grouped together. Given this caution, it is apparent that the average levels of reading and writing skills are greater for College Skills students than for ESL students, and the average levels of reading and writing skills for project participants are lower than for non-participants, especially if those students are ESL students. Besides the differences in populations, attention must be paid to the quality and quantity of instruction provided within the various categories. The project services seem to be insufficient to surmount the problems presented by the lower level ESL students. The data show that the average post-test scores in reading and writing for College Skills students approach the College cut-off scores for entry into the mainstream whereas those for ESL students don't begin to come close. These data suggest that there are probably differences between the two programs in terms of the numbers of students entering at much lower skill levels and in terms of the efficiency of instruction.

CONCLUSIONS AND RECOMMENDATIONS

The primary and most significant conclusion that one can draw after examining all of the data is that almost all groups of students enrolled in the Developmental Studies Department demonstrated growth in reading, writing, and general language skills over the course of the academic year 1989-1990.

For College Skills students, the mean post-test DTLS score for all students, regardless of level was 10.72, just slightly below the cut-off score for demonstrating minimum competency (score = 11). Similarly for writing, the mean post-test writing score for all College Skills students was 5.61, which approaches the college cut-off score of 6. These scores represent significant progress for the College Skills students and lead to the conclusion that, for the most part, the placements for students are accurate, the curricula are meeting their needs, and the quantity and quality of instruction are sufficient.

Many of the ESL students within the Developmental Studies department demonstrated positive growth in reading, writing, and general language development, but the data reveal a mixed picture of development depending upon level of placement and site.

In reading, for example, lower level full and part time

students did not show significant growth in either the fall or the spring semester. In writing, almost all students, except those at Haverstraw, showed significant growth during the fall semester. In the spring those who made little progress were the part-time students and the lowest levels. In general language development, all students demonstrated growth. The non significant statistical results for higher level students is an artifact of the data attributable to the ceiling imposed by the English Language Test.

In spite of the general language and skill development of ESL students, the average post-test scores of students are far below the college competency level in both reading and writing. Only at Main campus and only at levels 065 and higher do post-test scores approach or exceed the college cut-offs in reading and writing. It is important to remember that we are looking at averages for groups; obviously, some students at other levels did achieve competency level scores in reading and writing and were able to move into the mainstream. What is apparent is that there appear to be many more students at lower levels in ESL at all the campuses, and that the program as constituted is experiencing difficulty in raising competency levels within the framework of one academic year.

It would seem that the major factor contributing to the differences in achievement levels between ESL and College Skills students is the presence in ESL of many more students whose reading, writing, and language skills are at very low levels. The presence of lower level students in higher numbers results in lowering the pre- and post-test averages for each of the centers on each of the variables. Thus, many students potentially would spend many more semesters in ESL courses in order to reach the minimum competency level. The bulk of the resources available for the instruction of ESL students are expended on those with the lowest levels of skills. This fact leads to another hypothesis about why the ESL students' average post-test scores are low, namely the nature of the instruction for ESL students.

If students enter ESL with very low levels of proficiency in English, much of the instruction must be designed to improve general language proficiency. The nature of this instruction focuses on grammar, syntax, idiom, and vocabulary development. Development of skill in reading and writing is incidental; reading and writing are utilized as modes through which the major instructional objectives relating to language development are realized. It is only after students have grasped the basic structures, vocabulary and grammar of English, that they can turn their attention to the more

advanced skills involved in reading and writing skills. It is not that reading and writing do not exist in the lower skill level classrooms; it is that the nature of that reading and writing does not begin to approach the difficulty or complexity required for meeting the college competency level and for functioning in college classes conducted in English. Therefore, it is hypothesized that another major factor influencing achievement levels and related to the first factor, the characteristics of the ESL students, is the nature of the instruction, specifically that the objectives of the bulk of the instruction in ESL are to improve language proficiency. That this goal is being met can be seen by across-the-board gains for all students on the English Language Institute test.

Unfortunately, this test has no known norms and no known validity; therefore, there is no way to know what the scores mean or how much is enough in order to be able to focus on higher level reading and writing skills. This factor, coupled with the fact that neither the DTLS nor the writing sample are useful for making discriminations between students at the lower end of their scales, means that placement in ESL sections reduces itself to some very subjective factors with low levels of consistency both within and across Learning Centers. Thus, another factor which may be contributing to

the lower levels of achievement is the inadequacy and inconsistency of the placement procedures. The effect of this insufficiency on instruction is that conscientious instructors like those in ESL will modify the curriculum and the instructional objectives to match their students' needs and abilities which, in turn, impacts negatively on end of semester reading and writing test scores.

The data and the conclusions reported here have remained remarkably consistent from last year to this year. It follows that the issues raised and the recommendations will also be the same as those presented in last year's report. Having postulated some factors which may be useful in explaining the data, we are left with some questions which now, more than ever, need to be resolved.

First, there is the question of the ESL students, namely, who should be a student within a college-level ESL program? What level of skill and proficiency with the English language should a potential student have? There are constraints which make answering these questions a necessity; those associated with the allocation of college resources and those imposed externally by the availability and duration of financial aid. Many colleges deal with this issue by setting minimum proficiency levels for admission to the college-level ESL courses. In the case of students from abroad, results of

TOEFL must be above certain cut-off levels in order for students to qualify for admission. In the case of resident students, results of other tests of language proficiency for which norming and validity data exist must be above specified cut-off levels.

Looking at the data that is available for this year and last year suggests that reasonably consistent progress in reading and writing requires entering the sequence with the following minimum scores:

25 on the ELI test
3 on the Writing sample
4 on the DTLS

This suggestion is based on an intuitive rather than an empirical approach. While this may be a reasonable first step in determining eligibility, final determinations of levels of proficiency must await the outcome of an empirical study.

Next, there is the question of the nature of the instruction provided to ESL students within the college-level program. How much instruction should be provided in general language proficiency and how much in the reading and writing skills necessary for achieving satisfactory grades in college courses taught in English? Most colleges provide between one and three semesters of instruction below the level of introductory college courses. Financial aid guidelines would

dictate a maximum of four semesters if there are a sufficient number of credit bearing courses which students can take because they do not rely too heavily on reading and writing as the primary modes of instruction and evaluation. It would seem that the bulk of the instruction within the ESL sequence should be focused on improving reading and writing skills in English.

Third, there is the question of how to place students accurately so that they get the kind of instruction they need and can potentially move through the sequence experiencing success and developing the skills they need in order to move into the mainstream within a predictable and realistic time frame. When instruments are found to determine admission, they may also be used along with currently existing assessment instruments in developing criteria for placement and movement between levels. It may be necessary to make some modifications in the scoring scale for the writing assessment, especially at its lower end, in order to improve its usefulness for placement of ESL students. These placement decisions must be developed utilizing the most objective criteria that can be devised; they must be consistently applied at all the Learning Centers and for all categories of students: ultimately, they must be validated through some kind of empirical study.

Finally, there is the last question; what happens to the students who do not have sufficient language proficiency to be admitted to a college level ESL sequence? Prior years' evaluations have suggested that many of the lower level ESL students have a desire to improve their English language skills but not necessarily an immediate desire to pursue a college education. Developing a literacy program under the aegis of the college but not within the framework of the college curriculum solves the problems of both sets of students: those denied admission because of low proficiency and those desiring only to improve their English proficiency. Completion of this program at a satisfactory level of proficiency could become part of the criteria for admission to the college-level ESL sequence, should an individual desire to pursue college work.

In an attempt to address the issue just raised, a pilot program in English Language Literacy was undertaken in 1989-1990 in cooperation with BOCES at the Haverstraw Center. (See S. Drinane's report pp. 21-28) It is very difficult to draw many conclusions from this report about the success or the failure of the pilot, or about how the students fared as a result of the instruction. Since the BOCES program encompassed many fewer hours of instruction than the Haverstraw program, it would be difficult to imagine that students experienced as much growth in language proficiency

as they would have if they had been in the college program. It would seem reasonable to propose that the BOCES program should develop different levels and be able to accommodate more levels of students. It is highly probable that given the level of proficiency of students attending the Haverstraw Center none of these students should be in a college-level program. There is virtually no difference between the scores of students enrolled in the College ESL program this year and last year. It would seem that the major criterion for placement in BOCES was first language illiteracy. Without knowing exactly what the placement criteria were, what the John test measures, what levels of instruction are available, and what the criteria for success are, it is very difficult to assess the impact of this pilot. Perhaps incorporating the evaluation of the pilot into the evaluation of Developmental Studies in subsequent years would be advisable.

Currently only students from Haverstraw are being accommodated by the BOCES program; however, it is increasingly apparent that lower level students from Spring Valley and from Main Campus should probably not be attending á college-level ESL program, i.e., those placed at the following levels: 030, 035, 036, 040, 041, and 045. Because these represent a large number of students at a variety of skill levels, an alternate sequence through BOCES and/or under the umbrella of the credit-free program needs to be

developed. The currently developed BOCES pilot is one small step in the right direction, but it is much too restricted as it now stands.

In summary, the questions raised and the solutions proposed and begun require time and attention from the faculty and the administration. Time will be required for finding and/or developing instruments and procedures for admission, placement, and movement. Time will be needed to make curricular modifications. Staff development will be needed to support faculty who may be moving in new and different directions. Institutional support will be needed and leadership required if an extensive new credit-free program is to be developed and alternative funding sources are to be cultivated. In short, these recommendations can only be implemented if the College administration can provide support, attention, time, and effort in support of these activities.

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Appendix A

RCC Competency Assessment Policy

RCC COMPETENCY ASSESSMENT POLICY

To ensure that all students are placed into course work appropriate to their skills, Rockland Community College has a policy of assessing all applicants for placement in English and mathematics courses. The English Assessment consists of a reading comprehension evaluation and a writing sample on a given topic. As a result of these assessments, students may be placed in English Composition, College Skills, or English as a Second Language courses. The Mathematics Assessment includes a required computation section and an algebra section which students are encouraged to take. Students may be placed in Mathematics Skills, College Mathematics, Intermediate Algebra, or one of the more advanced courses offered by the Mathematics Department.

First-Time College Students: All entering students who have not previously attended college and are planning full-time enrollment (12 or more degree credits) should take the English and Mathematics Assessments as soon as possible after acceptance into the College and before registration. This applies to all students, including those at local learning centers and sites.

An entering student does not have to take the English Placement Examination if, in the judgement of the English as a Second Language (ESL) faculty coordinator or College Skills

instructor, the student cannot perform on the assessment, is to be placed into a beginning section of ESL or Communication Skills (CS 011 or CS071 or CS072), and will be taking no other courses. A waiver form for the English Assessment must be signed by the ESL coordinator of Assessment and Placement.

Part-time students who intend to register for a credit-bearing mathematics course must take the Mathematics Assessment before enrolling in the course, regardless of the number of credits already earned.

Part-time students registering for English 101 or Business Correspondence (EN 110, BU 110) must take the English Assessment before enrolling, regardless of the number of degree credits already earned.

All other part-time students enrolling for less than 12 credits will be required to take the English and Mathematics Assessments before registering for their sixteenth degree credit.

Transfer Students: In accordance with Rockland's policy on advanced Standing, transfer students may be exempt from the English and/or Mathematics Assessment, based on a review of their previous academic record. However, when applying to specific programs, they may be required to take the English and/or Mathematics Assessment.

Appendix B

Special Services Project Tutorial Manual

See Developmental Studies
Department/Special Services Project
Annual Report, 1988-1989

Appendix C

Special Services Project Taxonomy of Materials

See Developmental Studies
Department/Special Services Project
Annual Report, 1988-1989

ERIC Clearinghouse for
Junior Colleges
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